

ABSTRACT

A fiber reinforced composite article, comprising a matrix and reinforcing fibers and subjected during operation concurrently to a plurality of temperatures and stresses, varying between a plurality of regions of the article, experiences different stresses concurrently in different regions of the article. The article is provided with fiber reinforcement of a strength in each region greater than the stress experienced in that region. Such fiber reinforcement is provided through a member for inclusion in the matrix, for example in the form of at least one of a fabric, weave, braid, lay-up, etc. One form of such an article for use at relatively high temperatures is a turbine engine component, for example a gas turbine engine exhaust flap. Another form of such an article is a gas turbine engine blading component.